AMENDMENTS

In the Claims

1.**(currently amended)** A method of manufacturing an oriented film ~~by~~ comprising the steps of:

forming a blend ~~of~~ including at least two polymers P1 and P2, ~~which~~ where both are at least partly crystalline at a temperature below 100°C~~;~~ where ~~whereby~~ P1 has a mechanically determined melting point which is at least 20°C higher than ~~the~~ a mechanically determined melting point of P2,

~~extending~~ extruding the blend to form a film and

stretching the film, ~~whereby~~ where the polymers ~~are selected such that they exist as~~ form separate phases in the stretched film, and P2 in its unoriented state at 20°C exhibits a coefficient of elasticity (E) which is at least 15% lower than E of P1, and ~~oriented~~ stretched film comprises ~~an~~ a polymer alloy ~~of the polymer which is a dispersion of~~ fibrils of P1 surrounded by P2, whereby each fibril extend mainly in one direction and ~~generally~~ has a width and thickness which as a mean of these two dimensions is ~~around or lower than~~ less than or equal to about 5μm, and ~~further stretching of the film~~ wherein the stretching step includes the steps of after the extruding steps ~~partly takes place by draw-down after extrusion of~~ drawing-down the film while both components are at least partially molten, and ~~partly~~ at a later stage hot stretching the film ~~characterised in that the film after said draw-down is hot stretched~~ while P1 is in a solid state and P2 is molten or semimolten to selectively orient P1, such that ~~the~~ an elongation at break in the direction of this hot stretching, determined by slow drawing at 20°C, is at least 25%, ~~this~~ the hot stretching being carried out by drawing the film over a frictionally withholding device.

2.**(currently amended)** ~~A~~ The method according to claim 1, ~~characterised in that~~ wherein the stretching step further includes the step of, after ~~said~~ the hot stretching, ~~the film is further~~ a further stretching the film ~~stretched~~ while both components P1 and P2 are solid, ~~preferably~~ in such a manner that the product film has an elongation at break at 20°C (by slow drawing) of at least 25% in any direction.

3.**(currently amended)** ~~A~~ The method according to claim 1 ~~or claim 2~~, ~~characterised in that~~ wherein the fibrils are flat ~~with~~ having an average thickness ~~generally around or lower than~~ of less than or equal to about 1μm~~, preferably generally around or below 0.5μm, and more preferably~~

~~generally around or lower than 0.1μm,~~ and with average width ~~is generally around or lower than~~ of less than or equal to about 5μm.

4.**(currently amended)** ~~A~~ The method according to claim1, ~~characterised in that~~ wherein in order to reduce ~~the~~ cross dimensions of the fibrils, the molten blend during extrusion is passed through at least one screen or grid located in a chamber immediately upstream of ~~the~~ an exit orifice of ~~the~~ an extrusion device, ~~said~~ the chamber having a gap higher than ~~the~~ a gap of the exit orifice.

5.**(currently amended)** ~~A~~ The method according to claim 4, ~~characterised in that~~ wherein each ~~such~~ of the grids has walls extending several ~~millimetres~~ millimeters in the direction of the flow of the molten blend.

6.**(currently amended)** ~~A~~ The method according to claim 5, ~~characterised in that~~ wherein the major walls in each such grid are slanted so that each forms an angle between about 10 to about 70° to the major surface of the flow entering the grid.

7.**(currently amended)** ~~A~~ The method according to claim 6, ~~characterised in that~~ wherein the slanting and the wall thickness and distances between the walls are such that in a longitudinal section of the device perpendicular to major surface of the flow as this enters the grid, there are at least four such walls.

8.**(currently amended)** ~~A~~ The method according to claim 6, ~~characterised by~~ wherein at least two grids, where in the such walls of one grid are slanted in the opposite direction to the walls of the other grid.

9.**(currently amended)** ~~A~~ The method according to claim 1, ~~characterised in that~~ wherein in succession to the extrusion and attenuation of the blend while both P1 and P2 are molten, the film is first cooled to solidify P1 and P2, thereafter the film is heated in air-lubricated engagement with a heating body of controlled temperature to melt or at least partially melt P2, while keeping P1 solid, and immediate thereafter, while P2 still is at least partially molten and P1 is solid, the film is subjected to the ~~said~~ the selective orientation of P1 and subsequent solidification of P2.

10.**(currently amended)** ~~A~~ The method according to claim 1, ~~characterised in that~~ wherein the frictional is withholding device comprises one or more bars with rounded edges over which the film is dragged while following an adjustable arc of the bar edge, and ~~said~~ the bar or bars are maintained at a temperature which prevents the film from sticking to the edge or edges, and the length of travel in contact with the edge or edges is adapted to prevent P2 wholly solidifying.

11.**(currently amended)** ~~A~~ The method according to claim 9, ~~characterised in that~~ wherein at least the process steps from and including extrusion to and including the solidification of P2 are carried out in-line, whereby the line also comprises a hold-back device acting between the cooling and the subsequent heating~~, and preferably the process steps following solidification of P2 are also carried out in-line with the former process steps~~.

12.**(currently amended)** ~~A~~ The method according to claim 11, ~~characterised in that~~ wherein the film is extruded as a flat film, and the controlled hold-back between cooling and subsequent heating is established by a roller arrangement, which also may supply the ~~said~~ the cooling.

13.**(currently amended)** ~~A~~ The method according to claim 11, ~~characterised in that~~ wherein the film is formed and treated in tubular form from extrusion and at least to the final solidification of P2, whereby the controlled hold-back between cooling and subsequent heating is established by one or more circular rings with rounded edges over which the film is dragged while following an adjustable arc of the rounded edge, and ~~said~~ the ring or rings are maintained at a temperature which prevents the film from sticking to the ~~said~~ the edge or edges.

14.**(currently amended)** ~~A~~ The method according to claim 11, ~~characterised in that~~ wherein the ~~said~~ heating is carried out with the film in air-lubricated engagement with two heating bodies of which is provided one on each side of the ~~film, the spacing between said heating bodies preferably being adjustable~~.

15.**(currently amended)** ~~A~~ The method according to claim 1, ~~characterised in that~~ wherein the film immediately after the extrusion is cooled to solidification of P1 while P2 is kept molten or

semimolten, and further in immediate succession, the selective orientation of P1 over a frictionally withholding device is carried out with the polymers in such states.

16.**(currently amended)** ~~A~~ The method according to claim 15, ~~characterised in that~~ wherein the frictionally withholding device comprises one or more bars with rounded edges over which the film is dragged while following an adjustable bow-length of the edge, and ~~said~~ the bar or bars and the length of travel in contact with the edge or edges is adapted to prevent P2 wholly solidifying.

17.**(currently amended)** ~~A~~ The method according to claim 15, ~~characterised in that~~ wherein the cooling to the ~~said~~ state is carried out by air-lubricated engagement of the film with a cooling body of controlled temperature.

18.**(currently amended)** ~~A~~ The method according to claim 17, ~~characterised in that~~ wherein the cooling is carried out with the film in air-lubricated engagement with two heating bodies, one on each side of the film, the spacing between ~~said~~ the heating bodies preferably being adjustable.

19.**(currently amended)** ~~A~~ The method according to claim 2, ~~characterised in that~~ wherein the ~~said~~ further stretching is carried out in the same longitudinal direction as the hot stretching of the film.

20.**(currently amended)** ~~A~~ The method according to claim 19, ~~characterised in that~~ wherein by a suitable selection of the conditions for the different stretching processes, and optionally by addition of a finely dispersed fracture-promoting material to the extruded blend, the longitudinal orientation after full solidification is adapted to produce locations of rupture of the P1 fibrils and in connection with such rupture extra orientation of P2 in and around the ~~said~~ locations, the locations being generally extended in a linear fashion at an angle to the direction of orientation.

21.**(currently amended)** ~~A~~ The A method according to claim 19, ~~characterised in that~~ wherein the ~~said~~ further stretching is carried out at around50°C or at a lower temperature.

22.**(currently amended)** ~~A~~ The method according to claim 19, ~~characterised in that~~ wherein

in succession to ~~said~~ the further stretching, transverse stretching is carried out while P1 and P2 are solid~~, preferably under allowance of a simultaneous longitudinal contraction~~.

23.**(currently amended)** ~~A~~ The method according to claim 22, ~~characterised in that~~ wherein the further stretching is carried out under allowance of a simultaneous longitudinal contraction, where the longitudinal contraction is achieved by forming transverse pleats in the film prior to the transverse stretching, and the latter is carried out by means of a tenter frame.

24.**(currently amended)** ~~A~~ The method according to claim 2, ~~characterised in that~~ wherein the ~~said~~ further stretching is carried out transversely of the preceding longitudinal orientation of the film~~, preferably while the film is allowed to shrink in said longitudinal direction~~.

25.**(currently amended)** ~~A~~ The method according to claim 24, ~~characterised in that~~ wherein the film is allowed to shrink in said longitudinal direction, where the shrinking is achieved by forming transverse pleats in the film prior to the transverse stretching, and the latter is carried out by means of a tenter frame.

26.**(currently amended)** ~~A~~ The method according to claim 1, ~~characterised in that~~ wherein a minor surface layer is coextruded on at least one side of the blend to enhance bonding properties and/or modify frictional properties of the film.

27.**(currently amended)** ~~A~~ The method according to claim 1, ~~characterised in that~~ wherein P1 ~~consists of~~ comprises polypropylene polyamide or polyethylene terephthalate, and P2 mainly ~~consists of~~ comprises a propylene copolymer or polyethylene.

28.**(currently amended)** ~~A~~ The A method according to claim 27, ~~in which said~~ wherein the polypropylene is a crystalline copolymer of propylene.

29.**(currently amended)** ~~A~~ The method according to claim 27, ~~or 28 in which~~ wherein the polyethylene is a crystalline copolymer of ethylene~~, preferably linear low density polyethylene~~.

30.**(currently amended)** ~~A~~ <u>The</u> method according to claim 1, ~~characterised in that~~ <u>wherein</u> after the end of the mentioned steps, the film, which exhibits a uniaxial or unbalanced orientation, is laminated to one or more similarly or differently manufactured films of uniaxial or unbalanced biaxial orientation, whereby the films are arranged so that their main directions of orientation cross each other.

31.**(currently amended)** ~~A~~ <u>The</u> A method according to claim 1, ~~characterised in that~~ <u>wherein</u> additionally to the mentioned steps the film is cut into narrow longitudinally oriented tapes.

32.**(currently amended)** A method of forming a film or sheet of thermoplastic polymer alloy in which there is formed an intimate blend of polymer material P1' and polymer material P2', the blend is extruded through a die and the extruded film is stretched after extrusion in which the flow passage through the die comprises an exit orifice having an exit gap, ~~characterised in that~~ <u>wherein</u> upstream from the exit orifice there is provided a grid chamber comprising one or more grids through which the blend passes, the grid or grids having at least 4 (in the longitudinal sections perpendicular to the main surfaces to the flow) closely spaced lamellae having walls extending several ~~millimetres~~ <u>millimeters</u> in the direction of the flow, and, between the lamellae apertures of a size selected to reduce the average size of the dispersed phase of P1' or P2' in the blend, the grid or grids being located at a position in the chamber where the gap is wider than the ~~said~~ exit gap, the grid chamber further comprising a gap reduction portion between the screen and the die exit wherein the gap through which the blend flows is reduced at least part way to the gap of the die exit.

33.**(currently amended)** ~~A~~ <u>The</u> method according to claim 32, ~~characterised in that~~ <u>wherein</u> the lamellae in each such grid are slated so that each forms an angle between about 10 to about 70° to the major surface of the blend flow entering the grid.

34.**(currently amended)** ~~A~~ <u>The</u> method according to claim 33, ~~characterised in that~~ <u>wherein</u> the major lamellae in each such grid are substantially planar.

35.**(currently amended)** ~~A~~ <u>The</u> method according to claim 33, ~~in which~~ <u>wherein</u> the lamellae are substantially parallel to the flow as it enters the grip.

36.(**currently amended**) ~~A~~ The method according to claim 34, ~~characterised by~~ wherein at least two such grids which mutually are oppositely slanted in relation to the direction of the blend flow entering the grid.

37.(**currently amended**) ~~A~~ The method according to claim 32, ~~characterised in that~~ wherein there is coextruded a surface layer at least on one side of the blend flow~~, preferably before this flow meets the grid or grids~~.

38.(**currently amended**) ~~A~~ The method according to claim 32, ~~characterised in that~~ wherein P1' and P2' are incompatible to such an extent that they exist as separate phases in the final film, but are ~~compatibilised~~ compatibilized either by use of an alloying agent or mechanically by sufficient mixing and attenuation, and P2' in its unoriented state at 20°C exhibits a coefficient of elasticity (E) which is at least 15% lower than E of P1', ~~and preferably but not necessarily the mechanically determined melting point of P1' is at least about 20°C higher than that of P2',~~ and further by adaptions of rheological conditions, percentages of the components, and conditions for mixing and extruding a dispersion of microscopically fine fibrils or fibril network of P1' surrounded by P2' is formed in the alloy, whereby each fibril extends mainly in one direction and ~~generally~~ has a thickness around or lower than 5µm, ~~preferably around or lower than 1µm, and still more preferably around or lower than 0.1 µm~~ and width at least 5 times it thickness, and further ~~characterised in that~~ where the film is stretched after at least P1'has been solidified.

39.(**currently amended**) ~~A~~ The method according to claim38, ~~characterised in that~~ wherein the ~~said~~ stretching is transverse to the direction of the fibrils~~, and preferably the film is allowed to contract in the direction of the fibrils during said stretching~~.

40.(**currently amended**) ~~A~~ The method according to claim ~~38~~39, ~~characterised in that~~ wherein the film is allowed to contract in the direction of the fibrils during the stretching, where the ~~possibilities for~~ contractions are introduced by a preceding fine transverse pleating of the film.

41.(**currently amended**) ~~A~~ The method according to claim 40, ~~characterised in that~~ wherein

the step of stretching transverse to the direction of the fibrils is preceded by stretching in the direction of the fibrils while the latter are solid.

42.**(currently amended)** ~~A~~ The method according to claim38, ~~characterised in that~~ wherein P1' ~~consists of~~ comprises polypropylene, polyamide or polyethylene terephthalate, and P2' mainly ~~consists of~~ comprises a propylene copolymer or polyethylene.

43.**(currently amended)** ~~A~~ The method according to claim 42, ~~in which~~ wherein the polypropylene is a crystalline copolymer of propylene.

44.**(currently amended)** ~~A~~ The method according to claim 42, ~~or 43 in which~~ wherein the polyethylene is a copolymer of ethylene~~, preferably linear low density polyethylene~~.

45.**(currently amended)** ~~A~~ The method according to claim 38, ~~characterised in that~~ wherein the film is given a strong uniaxial or unbalanced biaxial orientation, and subsequently the film is laminated to one or more similarly or differently manufactured film of uniaxial or unbalanced biaxial orientation, whereby the films are arranged so that their main directions of orientation cross each other.

46.**(currently amended)** ~~A~~ The method according to claim38, ~~characterised in that~~ wherein subsequently the film is cut into narrow longitudinally oriented tapes.

47.**(currently amended)** ~~A~~ The method according to claim 32, ~~characterised in that~~ wherein P1'is chosen to exhibit desirable barrier properties, and P1'and P2'are incompatible to such an extent that they exist as separate phases in the final film, but are ~~compatibilised~~ compatibilized either by use of an alloying agent or mechanically by sufficient mixing and extension, ~~and preferably but not necessarily the mechanically determined melting point of P1' is at least about 20°C higher than that of P2',~~ and further by adaptions of rheological conditions, percentages of the components, and conditions for mixing and attenuation a dispersion of microscopically fine fibrils or fibril network of P1' surrounded by P2' is formed in the alloy as whereby each fibril extends in one main direction, has a thickness around or lower than 5µm~~, preferably around or lower than 1µm,~~ and has a width at

least 5 times its thickness.

48.**(currently amended)** ~~A~~ The method according to claim 32, ~~characterised in that~~ wherein P1' and P2' are incompatible to such an extent that they exist as separate phases in the final film, but are ~~compatibilised~~ compatibilized either by use of an alloying agent or mechanically by sufficient mixing and extrusion ~~and preferably but not necessarily the mechanically determined melting point of P1' is at least about 20°C higher than that of P2'~~, and further by adaptions of rheological conditions, percentages of the components, and conditions for mixing and attenuation a dispersion of microscopically fine fibrils or fibril network of P1' surrounded by P2' is formed in the alloy, whereby each fibril extends mainly in one direction, has a thickness around or lower than 5μm, ~~preferably around or lower than 1μm~~, and has width at least 5 times its thickness, and further ~~characterised in that~~ where there is added a volatile expansion agent prior to or during the extrusion, which agent is soluble in P2' but generally not in P1', whereby expansion is takes place after extrusion.

49.**(currently amended)** An extruded oriented film which is in the form of a crosslaminate, in which it is laminated to another oriented film, whereby the main directions of orientation cross each other, or is in the form of a rope, twine or woven-tape products, the film comprising a layer of alloy of at least two polymers P1 and P2, which both are at least partly crystalline at temperatures less than 100°C, wherein P2 in its unoriented state at 20°C exhibits a coefficient of elasticity (E) which is at least 15% lower than E of P1, and the alloy comprises a dispersion of microscopically fine fibrils or fibril network of P1 surrounded by P2, wherein each fibril extends mainly in one direction and generally has width and thickness wherein the mean of these two dimensions is around or lower than5μm, ~~characterised in that~~ wherein

a) the P1 fibrils are flat and generally parallel with the main surfaces of the film with thicknesses generally around or lower than 1μm and width at least 5 times the thickness, and/or

b) the oriented film exhibits locations of rupture of the P1 fibrils, which locations extend in a generally linear fashion across the film at an angle to the direction of orientation.

50.**(currently amended)** ~~A~~ The film according to claim 49, ~~characterised by~~ wherein a minor

coextruded surface layer on at least one side of the alloy layer to enhance bonding properties and/or modify frictional properties of the film.

51.(**currently amended**) ~~A~~ The film according to claim 50, ~~characterised in that~~ wherein P1 ~~consists of~~ comprises polypropylene polyamide or polyethylene terephthalate, and P2 mainly ~~consists of~~ comprises a propylene copolymer, or polyethylene.

52.(**currently amended**) ~~A~~ The film according to claim 51, ~~in which~~ wherein the polypropylene is a crystalline copolymer of propylene.

53.(**currently amended**) ~~A~~ The film according to claim 51, ~~in which~~ wherein the polyethylene is a copolymer of ethylene~~, preferably linear low density polyethylene~~.

54.(**currently amended**) ~~A extruded~~ The film according to claim 49, wherein the form ~~which~~ is a crosslaminate.

55.(**currently amended**) ~~A~~ The film according to claim 49, wherein the form is rope, twine or woven-tape products.

56.(**currently amended**) An extruded film comprising a layer of an alloy of at least two polymers P1 and P2, which both are at least partly crystalline at temperatures under 100°C and are incompatible to such an extent that they exist as separate phases in the final film but are ~~compatibilised~~ compatibilized sufficiently for practical purposes, comprising a dispersion of microscopically fine fibrils or fibril network of P1 surrounded by P2, wherein each fibril extends mainly in one direction, ~~characterised in that~~ where the fibrils of P1 are flat and generally parallel with the main surfaces of the film with thicknesses generally around or lower than 1 μm, and width at least 5 times the thickness, and ~~further characterised in that~~ where P1 is chosen to exhibit desirable barrier properties and further ~~characterised by~~ comprising, in longitudinal cross-section perpendicular to the main surfaces of the film, at least 4 die lines.

57.(**currently amended**) ~~A~~ The film according to claim 56, ~~characterised by~~ further comprising

a minor coextruded surface layer on at least one side of the alloy layer to enhance bonding properties and/or modify its frictional properties.

58.(**currently amended**) ~~A~~ The film according to claim 56, ~~characterised in that~~ wherein P1 consists of EVOH, vinylidene chloride polymers or polyamide.

59.(**currently amended**) ~~An extruded~~ The film according to claim 56, ~~which~~ wherein the film is uniaxially or biaxially oriented and is laminated to another oriented film, whereby the main directions of orientation cross each other.

60.(**currently amended**) A cellular expanded film made by extrusion in the presence of an expansion agent, ~~characterised in that~~ where the film is made from an alloy of at least two polymers P1 and P2, which both are at least partly crystalline at temperatures under100°C, the alloy comprising a dispersion of microscopically fine fibrils or fibril network of P1 surrounded by P2, whereby each fibril extends mainly in one direction and is flat with thicknesses generally around or lower than 1 μm, and width at least 5 times the thickness.

61.(**currently amended**) ~~A~~ The film according to claim 60, wherein the film ~~which~~ is uniaxially or biaxially oriented and is laminated to another film, whereby the main directions of orientation cross each other.

62.(**currently amended**) ~~A~~ The film according to claim 60, wherein the film is in the form of rope, twine or woven-tape products.

63.(**currently amended**) ~~A~~ The film according to claim 60, wherein the film is in the form of split fibre products.

64.(**currently amended**) ~~A~~ The film according to ~~any of~~ claims 60, ~~to 63 in which~~ wherein P2 in its unoriented state at20°C exhibits a coefficient of elasticity (E) which is at least 15% lower than an E of P1.

65.(**currently amended**) ~~A~~ The film according to ~~any of~~ claims 56, ~~to 65 in which~~ wherein P2 is a copolymer of propylene or polyethylene~~, preferably a copolymer of ethylene and another alphaolefin, preferably LLDPE~~.

66.(**currently amended**) ~~A~~ The film according to ~~any of~~ claim~~s~~ 56~~-to 66~~, ~~in which~~ wherein, in the alloy, ~~the~~ a weight proportion of P1 is in the range 5 to75 %.

67.(**currently amended**) ~~Apparatus~~ An apparatus for extruding a thermoplastic material comprising a die having an exit orifice through which the molten material flows and stretching means for stretching the material after it is extruded by at least two steps, in the first of which the material is stretched longitudinally by first stretching means whilst at a high temperature, and in the second of which the material is stretched longitudinally by second stretching means at a lower temperature, comprising also means for cooling the extruded material between the two stretching means, ~~said~~ the cooling means comprising a frictional device arranged for contact with the extruded material, ~~characterised by~~ and further comprising stretching means downstream from ~~said~~ the second stretching means, and additional cooling means between ~~said~~ the second stretching means and ~~said~~ the further stretching means.

68.(**currently amended**) ~~Apparatus~~ The apparatus according to claim 67, wherein ~~in which~~ the ~~said~~ frictional device is provided with holes or is made of microporous metal for inwards or outwards passage of air whereby over and under pressure of air is provided to control the friction between the device and the material.

69.(**currently amended**) ~~Apparatus~~ The apparatus according to claim 67, further ~~or 68~~ comprising a shock cooling part upstream of the frictional device past which the extruded flow passes and which is cooled by a flow of cooling medium through its interior.

70.(**currently amended**) ~~Apparatus~~ The apparatus according to claim 69, ~~which~~ further ~~comprises~~ comprising a heating means between the shock cooling means and the frictional device, for controlled heating of the material.

71.**(currently amended)** ~~Apparatus~~ The apparatus according to claim 70, wherein ~~in which~~ the heating means comprises a pair of fixed heating blocks arranged on opposite sides of the extruded material.

72.**(currently amended)** ~~Apparatus~~ The apparatus according to ~~any of~~ claims 67, ~~to 71 in which~~ wherein the die has a grid chamber upstream from the exit orifice comprising one or more grids through which the extrudate passes, the grid or grids being located at a position in the chamber where the gap is wider than ~~said~~ the exit orifice gap, the grid chamber further comprising a gap reduction portion between the grid or grids and the exit orifice wherein the gap is reduced at least part way to the gap of the exit orifice.

73.**(currently amended)** ~~Apparatus~~ An apparatus for extruding a thermoplastic material comprising a die having an exit orifice through which the molten material flows and stretching means for stretching the material after it is extruded by at least two steps, in the first of which the material is stretched longitudinally by a first stretching means whilst at a high temperature, and in the second of which the material is stretched longitudinally by a second stretching means at a lower temperature, comprising also means for cooling the extruded material between the two stretching means, ~~said~~ the cooling means comprising a frictional device arranged for contact with the extruded material, ~~characterised in that~~ where there is provided a grid chamber upstream from the exit orifice comprising one or more grids through which the extrudate passes, the grid or grids being located at a position in the chamber where the gap is wider than ~~said~~ the exit orifice gap, the grid chamber further comprising a gap reduction portion between the grid or grids and the die exit wherein the gap is reduced at least part way to the gap of the exit orifice.

74.**(currently amended)** ~~Apparatus~~ The apparatus according to claim 72, wherein ~~or 73 in which~~ each such grid has walls extending several mm in the direction of the flow.

75.**(currently amended)** ~~Apparatus~~ The apparatus according to ~~any of~~ claims 73, wherein ~~to 74 in which~~ the major walls in each such grid are substantially planar and are slanted so that each forms an angle between about 10 to 70° to the major surface of the extrudate flow entering the grid.

76.(**currently amended**) ~~Apparatus~~ The apparatus according to claim 75, wherein ~~in which said~~ the angle and the wall thickness and distances between the walls are such that, in a longitudinal section of the die perpendicular to the main surfaces of the extrudate flow as this enters the grid, there are at least four such walls.

77.(**currently amended**) ~~Apparatus~~ The apparatus according to claim 75, further comprising ~~or 76 which comprises~~ at least two such grids which are slanted in opposite directions to one another.

78.(**currently amended**) ~~Apparatus~~ The apparatus according to ~~any of~~ claims 67, further ~~to 77~~ comprising means for coextruding a surface layer at least on one side of the extrudate.

79.(**currently amended**) ~~Apparatus~~ The apparatus according to ~~any of~~ claims 67, further ~~to 78~~ comprising means for transverse stretching of the extruded film downstream of the second stretching means.

80.(**currently amended**) ~~Apparatus~~ The apparatus according to claim 79, wherein ~~in which~~ upstream of the transverse stretching means there is a longitudinal pleating device~~, preferably comprisinga pair of rubber belts between which the extruded material passes~~.

81.(**currently amended**) ~~Apparatus~~ The apparatus according to ~~any of~~ claims ~~79 to~~ 80, ~~in which~~ wherein the transverse stretching means comprises a tenterframe including an oven.

82.(**currently amended**) ~~Apparatus~~ The apparatus according to claim 81, wherein the ~~in which said~~ oven comprises fixed heated blocks arranged on opposite sides of the material, provided with a heating means~~, preferably electrical heating means~~.

83.(**currently amended**) ~~Apparatus~~ The apparatus according to claim 82, ~~which~~ further comprising ~~comprises~~ a cooling block on at least one side of the material, downstream of the heating blocks, ~~said~~ the cooling block being provided with a channel for passage of cooling air~~, preferably in which said channel is in fluid communication with the surface of the block facing the extruded material, by virtue of forming the cooling block from microporous metal~~.

84.(**currently amended**) ~~Apparatus~~ The apparatus according to claim 82, wherein the ~~or 83, in which said~~ heating blocks are formed of microporous metal in fluid contact with channels for passage of heated air, whereby heated air exits the blocks from the surfaces facing the material passing therebetween, to lubricate passage of the material therebetween.

85.(**currently amended**) ~~Apparatus~~ The apparatus according to ~~any of~~ claims 67, wherein ~~to 72, in which~~ the further stretching means is a longitudinal stretching means ~~and the apparatus preferably comprises pleating means for imposing transverse pleats in the material prior to said~~ the ~~longitudinal stretching~~.

86.(**currently amended**) ~~Apparatus~~ The apparatus according to claim 85, including a laminating station, in which a second sheet material is laminated to the extrudate~~, said laminating station preferably being upstream from the longitudinal cold stretching means~~.

87.(**currently amended**) ~~Apparatus~~ The apparatus according to claim 86, ~~in which~~ wherein the extrusion die is a circular die for extruding a tube of material, and which further comprises helical cutting means downstream of the ~~said~~ the second stretching station, and upstream of the laminating station, in which the tube of material is helically cut and two plies of the extruded material are laminated to one another with their main directions of orientation arranged at an angle to one another.

88.(**currently amended**) ~~Apparatus~~ The apparatus according to ~~any of~~ claims 67, wherein ~~to 86 in which~~ the extrusion die is a flat die.

89.(**currently amended**) ~~Apparatus~~ An apparatus for extruding a thermoplastic material comprising a die having an exit orifice through which the molten material flows and stretching means for stretching the material after it is extruded, ~~characterised in that~~ where the die has a grid chamber upstream from the exit orifice comprising one or more grids through which the extrudate passes, the grid or grids being located at a position in the chamber where the gap is wider than ~~said~~ the exit orifice gap, the grid chamber further comprising a gap reduction portion between the grid

or grids and the exit orifice wherein the gap is reduced at least part way to the gap of the exit orifice and the or each grip comprises at least 4 (in the longitudinal sections perpendicular to the main surfaces of the flow) closely spaced lamellae having walls extending several mm in the direction of flow of molten material and, between the lamellae having apertures through which the molten material can flow.

90.**(currently amended)** ~~Apparatus~~ The apparatus according to claim 89, wherein ~~in which~~ the lamellae in each such grid are slanted so that each forms an angle between about 10 to 70° to the major surface of the extrudate flow entering the grid.

91.**(currently amended)** ~~Apparatus~~ The apparatus according to claim 90, wherein ~~in which~~ the lamellae are substantially planar and ~~preferably are~~ substantially parallel to the flow as it enters the grid.

92.**(currently amended)** ~~Apparatus~~ The apparatus according to claim~~s~~ 90 ~~or 91~~, further comprising ~~which comprises~~ at least two such grids which are slanted in opposite directions to one another.

93.**(currently amended)** ~~Apparatus~~ The apparatus according to claim~~s~~ 89 ~~to 92~~, further comprising means for coextruding a surface layer at least on one side of the extudate.

94.**(currently amended)** ~~Apparatus~~ The apparatus according to claim~~s~~ 89 ~~to 93~~, wherein ~~in which~~ the extrusion die is a circular die for extruding a tube of material.

95.**(currently amended)** ~~Apparatus~~ The apparatus according to claim~~s~~ 89 ~~to 93~~, wherein ~~in which~~ the extrusion die is a flat die.

96.**(currently amended)** ~~A~~ The film according to claim~~s~~ 49 ~~49a, 56 or 60~~, wherein ~~in which~~ the width of the fibrils are at least 10 times the thickness.

97.**(currently amended)** ~~A~~ The film according to claim 49, wherein ~~which,~~ in longitudinal

cross-section perpendicular to the main surface of the film, comprises at least 4 die lines.